

INSPECTION REPORT

Inspection Date(s):	Friday, February 15, 2019		
Time:	Entry: 12:50 pm	Exit: 1:45 pm	
Media:	Water		
Regulatory Program(s)	CWA NPDES/Construction Stormwater		
Operator Name:	San Manuel Band of Mission Indians		
Sub-Contractor Name:	Sukut Construction		
Project or Site Name:	Eastern Reservation Development		
Facility/Site Physical Location:	34° 8'45.25"N 117°12'42.41"W (<i>construction site entrance</i>)		
(city, state, zip code)	Highland, CA 92346		
County:	San Bernardino		
Geographic Coordinates:	34° 8'45.25"N 117°12'42.41"W (<i>construction site entrance</i>)		
Weather Conditions	Sunny		
Mailing address:	101 Purewater Lane		
(city, state, zip code)	Highland, CA 92346		
County:	San Bernardino		
Facility/Site Contact:	Clifford W. Batten	Environmental Manager	P (909) 425-3590
NPDES Number:	CAR 10I00J		
Indian Country Lands:	San Manuel Reservation		
Receiving Water:	City of San Bernardino MS4		
Facility/Site Personnel Participating in Inspection:			
Bryan Benso	Vice President of Planning and Real Estate Development San Manuel Band of Mission Indians	P (909) 864-8933	
Kimmy Crawford	Project Manager, QISP, Sukut Construction	P (714) 540-5351	
Inspector(s):			
Ken Watson	Inspector	City of San Bernardino	(909) 384-5225
Lawrence Torres	Inspector / Author	US EPA R9 ENF 3-2	(415) 947-4211
Signature:		Date:	
Supervisor Review:			
Greg Gholson	Acting Manager	US EPA R9 ENF 3-2	(415) 947-4209
Signature:		Date:	

SECTION I – INTRODUCTION

Purpose of the Inspection

The purpose of the inspection was to respond to a citizen complaint about stormwater run-off from the San Manual Band of Mission Indian's (hereafter, the Operator) Eastern Development Project (hereafter, *the Project*). At the time of the inspection, the Operator maintained Permit coverage under the [National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities](#) (the Permit). The Operator's NPDES Permit Number is CAR 10I00J (effective January 25, 2018). The inspection focused on the Operator's installation and maintenance of erosion and sediment controls implemented at the time of inspection. The inspection was conducted by USEPA Region 9 Stormwater Enforcement Program staff.

Opening Conference

USEPA inspector Torres and City of San Bernardino Inspector Watson (the Inspection Team) arrived at the Project on Friday, February 15, 2019 at approximately 12:50 pm. We were met by Mr. Bryan Benso, Vice President of Planning and Real Estate Development, and Ms. Kimmy Crawford, Project Manager, and held an opening conference at the entrance to the construction site. I, Lawrence Torres, introduced myself as an inspector from USEPA and presented my inspector credential to Mr. Benso. I explained that I was there to conduct a stormwater compliance inspection in response to a complaint we received about construction activities on the Project. Mr. Benso explained that he would be able to assist with my inspection. I explained to Mr. Benso that I would like to tour the Project, collect inspection photos to document my observations, and note best management practices (BMPs) implemented at the time of inspection.

Facility/Site Description

Eastern Development Project is a residential development for the tribal community. Per the Stormwater Pollution Prevention Plan (SWPPP), the Project will develop 42 houses on approximately 135 acres of tribal land. Proposed construction activities include rough grading, foundation and utility construction, lot-specific improvements, and landscaping / final stabilization. The Project is located on tribal land and is operated by the San Manual Band of Mission Indians. Drainage from the Project discharges into the City of San Bernardino Municipal Separate Storm Sewer System (MS4). Inspector Watson observed the discharge point and noted the connection to the City of San Bernardino MS4. For an overview of the Project, refer to the *Google Earth* image below (see *Figure A*).



Figure A. Google Earth image of the Project
Northeast of Taamiat Road / North Orange Street, Highland, CA 92349

SECTION II – OBSERVATIONS¹

Table 1. Permit Related Documents Reviewed Before the Inspection

<input checked="" type="checkbox"/> Stormwater Pollution Prevention Plan (SWPPP)	<input checked="" type="checkbox"/> Training Records
<input type="checkbox"/> Sampling Records	<input checked="" type="checkbox"/> Other (NOI)

Prior to the inspection, I performed a desk review the following:

- A copy of the Project's SWPPP received via email on September 21, 2018. The SWPPP was developed on November 30, 2017 and signed by the Operator and Sub-Contractor. The SWPPP included a site map, description of erosion and sediment controls, training records, and a copy of the Notice of Intent (NOI).
- A copy of the training records included with the SWPPP. A sign-in sheet was enclosed to document the most recent stormwater training held on March 19, 2018.
- A copy of the NOI dated January 11, 2018. The NOI lists the City of San Bernardino's MS4 asset, a 48-inch storm drain, as receiving the Project's stormwater discharge.

¹ The observations identified in Section II are based upon the site tour that was completed at the time of inspection. Information reviewed after the conclusion of the inspection may lead to findings that are not represented in this report.

Field Observations

The Inspection Team performed a site tour with Mr. Benso and Ms. Crawford who were present throughout the tour. During the site tour, I talked with Ms. Crawford about the ongoing maintenance of the Project's erosion and sediment controls and noted the following observations:

- The Operator installed a silt fence, fiber rolls, and vegetation stabilization measures to reduce soil erosion along the southern terraced slopes of the Project. Silt fencing was installed correctly and ran along the entire southern boundary of the Project. Fiber rolls appeared well maintained and were trenched, staked, and overlapped. Vegetation appeared well established to reduce soil erosion along the terraced slopes (Photographs 1, 5, 6).
- There was a vegetated swale outside of the Project boundary that receives stormwater run-off from the Project. Sand and gravel bag check dams were located inside the vegetated swale to control the velocity of stormwater during large storm events. Stormwater would enter the swale if water flows over the top of the lower levee, then would flow through a culvert and discharge into the City of San Bernardino's MS4 (Photographs 2, 4).
- I noted an unmaintained culvert and storm drain located under Holly Circle Drive, Highland, CA, operated by the City of San Bernardino. Based on the initial citizen complaint, I originally sent an email to the City of San Bernardino on September 24, 2018, asking them to address this ongoing issue (Photograph 3).
- There were two newly constructed levees installed to reduce the velocity of stormwater into the vegetated swale shown in Photograph 4. Due to recent rain events, there was sediment build up behind the levees. Ms. Crawford stated the sub-contractor will remove and repurpose the sediment as needed around the Project (Photograph 7, 11, 12, 14, 15).
- I observed a flood control channel that runs along the outside boundary of the Project. Although the Project directs stormwater to the two on-site levees, the Operator maintains the area in agreement with the City of San Bernardino. There is a storm drain riser, connected to the City of San Bernardino MS4, located in the channel to relieve the area during rain events (Photograph 8-10).
- There is a sediment basin constructed of concrete and installed as a permanent feature located at the toe of the southern slope. The sediment basin collects stormwater via various v-ditches that have been installed throughout the hillside of the project. The basin contained sediment from a recent rain event. Ms. Crawford stated that sediment is removed from the basin and is reused to construct berms and dikes throughout the Project. Water collected in the basin is reused as a dust control measure on-site (Photograph 13, 17).

Flow Path Observations

Stormwater that falls on-site is controlled by a system of berms, levees, and sediment basins. During a rain event, the Project is designed to convey stormwater toward the levees. If stormwater over tops the lower levee, stormwater would flow down the tarped slope on the backside of the levee and discharge into the City of San Bernardino's MS4 (via a 48-inch storm drain culvert), located near Holly Circle Drive, Highland, CA (Photographs 3, 4).

SECTION III – AREAS OF CONCERN

- The SWPPP should be revised to include a detailed description of the newly-installed sediment and erosion controls, including: (1) the size of the sediment basins; (2) the addition of two levees to reduce the velocity of run-off; (3) a maintenance schedule to outline how sediment is either repurposed or disposed of; and (4) how the water is reused on the Project. The Project's site map should also clearly identify all newly-installed BMPs located throughout the site.
- An accumulation of sediment behind the two levees, particularly the upper levee, from recent rain events. The Operator should maintain these structural BMPs to assure the proper functionality during future rain events.
- The culvert under Holly Circle Drive should be maintained regularly throughout the year. Google Earth images dating back to April 2012 show sediment build-up inside the culvert under Holly Circle Drive that prevents the flow of stormwater during rain events. My initial maintenance request to the City of San Bernardino was sent via email on September 24, 2018. At the time of the inspection, I observed sediment inside the culvert up to $\frac{3}{4}$ full.

Closing Conference

At the end of the site tour, I held a closing conference with Mr. Benso and Ms. Crawford and discussed each of the areas of concern listed above. I noted that my findings were preliminary and explained that I would provide the Operator a copy of the inspection report once final.

I requested that the Operator continue to monitor weather conditions, and continue to maintain their BMPs, especially through the rainy season. I reiterated my concern about the overburdened culvert and asked the City of San Bernardino to address the overdue maintenance of their MS4 assets immediately. Lastly, I requested timely attention to the areas of concern outlined in this inspection report and to provide photo documentation of any improvements made to address these concerns.

SECTION IV – LIST OF APPENDICES

Appendix A- Photograph Log



Photograph 1: Terraced slopes with vegetation, fiber rolls, and silt fence sediment and erosion control measures to stabilize soils.



Photograph 2: Overview of the vegetated swale as seen from Holly Circle Drive, Highland, CA.



Photograph 3: Close-up of the culvert that runs under Holly Circle Drive. Note: the deposition of sediment from previous rain events.



Photograph 4: Close-up of the existing vegetated swale designed to convey and infiltrate stormwater runoff from the area. Note: Sand and gravel bags installed to reduce the velocity of runoff during large storm events.



Photograph 5: Close-up of the fiber rolls installed on the southern slopes.



Photograph 6: Macro shot of the Project to show the BMPs installed to stabilize the soils.



Photograph 7: Backside of the lower levee designed to minimize the volume of runoff and allow sediment to settle before discharging into the vegetated swale.



Photograph 8: Flood control channel that flows along the southern perimeter of the Project. Note: The Operator has an agreement with the City of San Bernardino to maintain the area during the Project.



Photograph 9: Close-up of the riser inside the flood control channel.



Photograph 10: View of the Project from the flood control channel. Note: The Operator installed a tarp to reduce soil erosion and prevent sediment from entering the channel.



Photograph 11: Sediment accumulation behind the levee wall. Note: The Operator will maintain the newly-installed BMP throughout the Project.



Photograph 12: Photo of the hose that is connected to a pump that directs stormwater from the sediment basin (not pictured) into the storm drain.



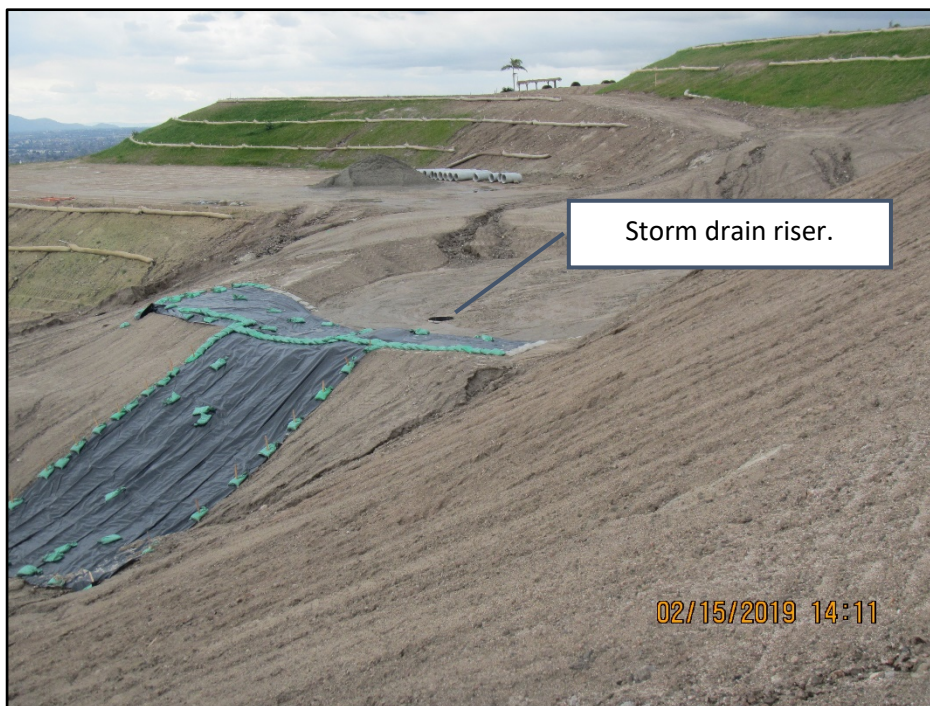
Photograph 13: Sediment basin designed to collect stormwater from various V-ditches installed throughout the hillside of the Project. Note: Sediment accumulation from recent rain events.



Photograph 14: Backside of the upper levee designed to minimize the volume of runoff and allow sediment to settle before flowing toward the lower levee (not pictured). Note: Sediment accumulation from recent rain events.



Photograph 15: View of the lower levee as seen from the base of the upper levee.



Photograph 16: Overview of the upper levee. The storm drain riser is buried under an accumulation of sediment from recent rain events.



Photograph 17: Overview of the sediment basin located near the base of the Project. Note: The Operator was pumping water from the basin into the storm drain.